

3. IRRIGATION AND FLOOD CONTROL

Outlay – `1103.52 crore

3.1.1 Rejuvenation and revamping of canal network is the thrust area of state government. The canal surface water distribution system consists of 14500 km of canals/distributaries covering six major systems in the State namely: Sirhind Canal system, Bhakra Main Line, Bist Doab Canal, Upper Bari Doab Canal, Sirhind feeder and Eastern canal. This canal system which is amongst the oldest in the country has out lived its life and its carrying capacity has been sub - optimized overtime. At present, 97% of the arable land in the State is irrigated, 27% from surface water (canal) irrigation and the remaining 73% met from the ground water resources. During the 10th Plan, about 107 thousand hectares of additional irrigation potential was created. During the 11th Plan, about 286 thousand hectares of additional irrigation potential was proposed to be created, out of which 157 thousand hectares has been brought under irrigation during last five year.

3.1.2 In the 11th Plan, the expenditure incurred was `1865.56 crore. The 12th Plan outlay for irrigation is `4935.64 crore. During 12th Plan, irrigation potential of 660 thousand hectares is likely to be restored and new potential of 300 thousand hectares will be created. An outlay of `922.64 crore is provided in the Annual Plan 2012-13. An outlay of `1103.52 crore is provided for irrigation and flood control sector in the financial year 2013-14. The likely potential created shall be 45 thousand hectares in the Annual Plan 2013-14.

MAJOR AND MEDIUM IRRIGATION

Ongoing Schemes

Centrally Sponsored Schemes

**IR-01 Extension of Phase-II of Kandi Canal-from Hoshiarpur to Balachaur
(AIBP) (25:75)**

Outlay – `155.85 crore

3.1.3 Kandi Canal Stage-II Project from Hoshiarpur to Balachaur i.e from RD 59.500 km to RD 130 km is an extension of Kandi Canal Stage-I, which has already

been constructed. The total cost of this project was ` 147.13 crore (at 5/97 price level) and was cleared by the Technical Advisory Committee of CWC, Ministry of Water Resources, in August 1999. The expenditure incurred during 9th Plan was ` 13.36 crore. This project has been undertaken under Accelerated Irrigation Benefit Programme (AIBP) since 2001-2002. The sharing pattern of this scheme was 67:33 between Government of India and State Government as central loan assistance. The funding pattern under AIBP has been changed to 25:75 between GoI and state government from 2008-09. The revised project cost of Kandi Canal Stage-II is ` 346.62 crore on the basis of January 2008 price level. The latest revised cost of this project is ` 540.24 crore. The total length of Kandi canal phase-II project is 70 km, out of which 56 km length has already been completed. The remaining 14 km length would be completed in 2013-14.

3.1.4 An outlay of ` 101.46 crore was provided under this scheme in the 11th Plan against which an expenditure of ` 172.37 crore has been incurred. An outlay of ` 210.00 crore and ` 40.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 155.85 crore is provided for Annual Plan 2013-14.

IR-02 Construction of Shahpur Kandi Dam (AIBP) (90:10)

Outlay – ` 100.00 crore

3.1.5 The Shahpur Kandi Project is a sister concern project of Ranjit Sagar Dam Project (which stands completed). The construction of Shahpur Kandi Dam Project is essential to get the optimum benefits of power and irrigation potential created by Ranjit Sagar Dam Project. Shahpurkandi Dam Project is being constructed on river Ravi to provide a balancing reservoir to have uniform water releases for Upper Bari Doab Canal, Kashmir canal off taking from Madhopur head works and high level Ravi canal (J&K) which will off take from right side of Shahpurkandi Dam Project. It will ensure optimum power generation during peak hours from Ranjit Sagar Dam Project. Since 2001-02 this project has been covered under AIBP. Cumulative expenditure of ` 236.00 crore has already been incurred upto March, 2013 on acquisition of land, preliminary design, investigation, development of infrastructural works, excavation of main dam, benches, left side head regulator, hydel channel and concreting of left side head regulator.

3.1.6 Shahpurkandi Dam Project has been declared as National Project by the Ministry of Water Resources, Government of India in Feb., 2008. Planning Commission, Government of India has accorded investment clearance of the project during 2010

amounting to ₹2285.81 crore. As per guidelines for the national projects, 90% of the cost of the irrigation component which is 28.61% is being provided by Ministry of Water Resources, Government of India as central assistance & balance 10% of the cost of the irrigation component is to be provided by the state government. Power component of the project which is 71.39% of the total cost is being provided by Punjab State Power Corporation Limited. Irrigation component works out to be ₹596.92 crore out of which Government of India shall provide ₹529.58 crore and GoP ₹67.34 crore. Power component works out to be ₹1689.47 crore. Irrigation and power components are worked out on the basis of balance cost of ₹2086.39 crore of project after deducting expenditure of ₹199.42 crore (upto 6/2009). Power Finance Corporation, New Delhi has already given the approval for 80% of the cost of power component as loan and remaining 20% of the cost of power component shall be arranged by Punjab State Power Corporation Limited. Target date is Oct., 2014. After completion of the project the potential of 5000 Ha in Punjab State and 32713 Ha. in J&K State shall be created. With the completion of Shahpur Kandi Dam Project, the full generation capacity of the R.S.D. Project (600 MW) will be utilized when all the turbines at the project will be made functional. An outlay of ₹200.00 crore was provided under this scheme in the 11th Plan against which an expenditure of ₹93.30 crore has been incurred. An outlay of ₹547.26 crore and ₹100.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ₹100.00 crore is provided for Annual Plan 2013-14.

IR-03/IR-04 Rehabilitation of Channels of First Patiala Feeder and Kotla Branch (AIBP) (25:75)

Outlay - ₹40.00 crore

3.1.7 First Patiala Feeder and Kotla branch of Sirhind Canal system (off taking from Ropar head works) are unlined canals, which runs in heavy filling reaches through sandy tract zone in Punjab. First Patiala Feeder is presently capable to carry 3600 cs supply against its authorize discharge of 4010 cs. After rehabilitation, the carrying capacity of First Patiala Fedder shall be 4914 cs. Similarly Kotla Branch is presently capable to carry 2550 cs against authorized discharge of 3018 cs. After rehabilitation, the carrying capacity of Kotla Branch shall be 3304 cs. GoP has decided to rehabilitate both these canals with 20% enhanced capacity so that adequate irrigation supply may be provided to the cotton belt area of districts of Patiala, Sangrur and Mansa. The revised total cost of project is ₹177.81 crore and physical target is 154 kms. The implementation of this project shall

provide better irrigation facilities to about 2.65 lac ha area and bring additional area of 68624 ha falling in Patiala, Sangrur, and Mansa districts under canal command. An outlay of ₹123.30 crore was provided under this scheme in the 11th Plan against which an expenditure of ₹120.91 crore has been incurred. An outlay of ₹2.93 crore and ₹20.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012- respectively. An outlay of ₹40.00 crore is provided for Annual Plan 2013-14.

IR-04/IR-05 Remodeling of Channels of UBDC System to meet the Revised Water Allowance (AIBP) (25:75) (completed)

Outlay - ₹0.00 lac

3.1.8 This scheme was envisaged to remodel the channels of UBDC system to cater to enhanced discharge subsequent to the increase in water allowance in UBDC tract on account of surplus water available after the completion of Ranjit Sagar Dam on river Ravi. The funds for remodeling UBDC Project, costing ₹177.80 crore were provided by the Government of India under AIBP. As a result, 1.18 lac hectares of agricultural area, falling in Districts of Amritsar and Gurdaspur has been benefited. The work on the project has been completed. An outlay of ₹8.00 crore was provided under this scheme in the 11th Plan against which an expenditure of ₹2.51 crore has been incurred. No outlay has been provided in the 12th Plan 2012-17. An outlay of ₹20.00 lac has been provided in the Annual Plan 2012-13. No outlay is provided for Annual Plan 2013-14.

IR-05/IR-06 Lining of Ladhuka Distributary System (RIDF-XII)(95:5) (Completed)

Outlay - ₹1.00 crore

3.1.9 The lining of Ladhuka Distributary System as NABARD project comprised lining of 74 KM length of channels at a cost of 4095.00 lac (4/06 price index) was sanctioned in 2006-07. During 2007-08, 2008-09 & 2008-09 the expenditure incurred was ₹12.23 crore, ₹7.37 crore and ₹8.45 crore respectively. The project stands completed. An outlay of ₹39.28 crore was provided under this scheme in the 11th Plan against which an expenditure of ₹28.86 crore has been incurred. An outlay of ₹2.84 crore and ₹1.40 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ₹1.00 crore is provided for Annual Plan 2013-14.

IR-06/IR-09 Sri Dashmesh Irrigation Project (AIBP) (25:75) (Completed)

Outlay - `0.10 crore

3.1.10 Sri Dashmesh Irrigation Project (SDIP) is meant for providing irrigation facilities to the Ropar, Sialba Majri, Chamkaur Sahib, Kharar, Bassi Pathana, Rajpura, Ghanaur and Dera Bassi Blocks of District, Ropar, Mohali, Fatehgarh Sahib and Patiala. The new canal takes water from the tail end of Anandpur Sahib Hydrel Channel at Lohand Khud and carry water through a carrier canal of 1000 cs capacity running parallel to the existing Nangal Hydrel Channel/Bhakhra Main Line upto Ropar. This additional carrier channel of 28 km. length was included in the Detailed Project Report (DPR). The scheme envisages canal irrigation for 1.30 lac hectares culturable command area in above districts.

3.1.11 The project cost was updated at January 2006 price index keeping in view the escalation and latest CSR rates etc. The cost was `857.00 crore. The project stands completed. No expenditure has been incurred during 11th Plan. An outlay of `400.00 crore and `1.00 lac has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `0.10 crore is provided for Annual Plan 2013-14.

IR-07 Extension, Renovation and Modernisation of Canals being Fed from River Sutlej

Outlay - `0.04 crore

3.1.12 Govt. of India has recently sanctioned new project for extension Renovation and Modernization of Canals being Fed from River Sutlej amounting to `734.00 crore under AIBP assistance. The detail of 4 canals are as under:-

IR-07(i)/IR-10(i) Rehabilitation of Bist Doab Canal System (AIBP) (25:75)

Outlay - `0.01 crore

3.1.13 Bist Doab Canal off takes from the right bank of river Sutluj upstream of Ropar head works with full supply discharge of 1452 Cs. The Bist Doab Canal System serves for Gross Culturable Area of 6.36 lac acres and Culturable Command Area of 4.90 lac acres of Nawanshahar, Hoshiarpur, Jalandhar and Kapurthala Districts. The authorized full supply discharge of this system is 1452 cusecs but at present, the system carries only 1000 cusecs and irrigates about 30240 hectares land. The Bist Doab Canal System is not capable to carry additional water as per demand of the area. The estimated cost of project is

₹ 210.90 crore. After the implementation of this project, Bist Doab System shall be able to carry 1832 cusecs discharge and existing area of 39860 hectares shall be restored and an additional area of about 8100 hectares shall be brought under irrigation. An outlay of ₹ 53.28 crore was provided under this scheme in the 11th Plan. However, no expenditure was incurred during 11th plan. No outlay has been provided in the 12th Plan 2012-17 and an outlay of ₹ 15.00 crore has been provided in the Annual Plan 2012-13. An outlay of ₹ 0.01 crore is provided for Annual Plan 2013-14.

IR-07(ii)/MI-8 Rehabilitation of Bathinda Branch (AIBP) (25:75)

Outlay - ₹ 0.01 crore

3.1.14 A project for rehabilitation of Bathinda Branch has been prepared to enable Punjab to use its full share of available water. The designed discharge of Bathinda Branch is 2786 cusecs. The Gross Command Area (GCA) is 3.64 lac hectares. Due to less carrying capacity of the canal, the existing irrigation under the command of this canal is 2.51 lac hectares. With the completion of the project, the designed discharge of the Bathinda Branch shall be increased to 3332 cusecs and irrigation potential of 63000 hectares will be restored and additional irrigation potential of 4900 hectares will also be created. An outlay of ₹ 20.00 crore was provided under this scheme in the 11th Plan. No expenditure was incurred during 11th plan. No outlay has been provided in the 12th Plan 2012-17 and an outlay of ₹ 15.00 crore has been provided in the Annual Plan 2012-13. An outlay of ₹ 0.01 crore is provided for Annual Plan 2013-14.

IR-07(iii)/MI - 9 Rehabilitation of Sidhwan Branch (AIBP) (25:75)

Outlay - ₹ 0.01 crore

3.1.15 A project for the rehabilitation of Sidhwan branch has been prepared to ensure full utilization of or share in Sidhwan branch off-takes from tail RD194444/R of Sirhind Canal at Manpur Head. The authorized discharge of Sidhwan Branch is 1751 cusecs and it supplies water for irrigation to the districts of Ludhiana, Moga and Ferozpur. The Gross Culturable Area (GCA) of the system is 1.71 lac hectares and Culturable Command Area (CCA) is 1.59 lac hectares. The existing area under irrigation of this canal is about 94638 hectares. The carrying capacity of the canal is not required to be increased. Only the sidelining of both sides of the canal is proposed. With the implementation of the project irrigation potential of about 32500 hectares shall be restored and an additional area of about 6000 hectares shall also be brought under irrigation. The outlay approved for Annual Plan 2009-10 is ₹ 3.50 crore for implementation of Hon'ble High Court order for cleaning of canal against which an

expenditure of ` 2.95 crore was incurred. An outlay of ` 10.00 crore was provided under this scheme in the 11th Plan against which an expenditure of ` 2.95 crore has been incurred. No outlay has been provided in the 12th Plan 2012-17 and an outlay of ` 15.00 crore has been provided in the Annual Plan 2012-13. An outlay of ` 0.01 crore is provided for Annual Plan 2013-14.

IR-07(iv) MI-10 Rehabilitation of Abohar Branch (AIBP) (25:75)

Outlay - ` 0.01 crore

3.1.16 Project aimed at rehabilitation of Abohar Branch has been prepared to enable Punjab to use its full share of available water. The designed discharge of Abohar Branch is 3089 cusecs. The Gross Culturable Area (GCA) is 3.57 lac hectares with Culturable Command Area (CCA) of 3.19 lac hectares. Due to less carrying capacity of the canal, the existing irrigation under the command of this canal is 2.55 lac hectares. With the completion of the project, the designed discharge of the Abohar Branch shall be increased to 3230 cusecs and about 63923 hectare area shall be restored and an additional area of 1870 hectares shall also be brought under the command of this canal. An outlay of ` 20.00 crore was provided under this scheme in the 11th Plan. No expenditure was incurred during 11th plan. No outlay has been provided in the 12th Plan 2012-17 and an outlay of ` 15.00 crore has been provided in the Annual Plan 2012-13. An outlay of ` 0.01 crore is provided for Annual Plan 2013-14.

IR-10/IR-13 Side Lining of Ghaggar Branch RD-0-172000 RIDF-XV (95:5)

Outlay - ` 0.50 crore

3.1.17 This project comprises lining of 52.44 KM length of channels at a cost of ` 51.69 crore in Patiala and Sangrur Districts. An additional irrigation potential equal to 3207 hectares annually will be created. This project has been approved by NABARD at a cost of ` 51.69 crore (NABARD share ` 49.11 crore + state share ` 2.58 crore). This project was started during the closure period of 2009-10. No outlay was provided under this scheme in the 11th Plan. An expenditure of ` 34.22 crore has been incurred in the 11th plan. No outlay has been provided in the 12th Plan 2012-17 and an outlay of ` 18.03 crore has been provided in the Annual Plan 2012-13. An outlay of ` 0.50 crore is provided for Annual Plan 2013-14.

IR-11/IR-14 Project for relining of Sirhind Feeder from RD 119700-447927 (AIBP)

(25:75)

Outlay - `40.00 crore

3.1.18 In a comprehensive assessment of water logging in southern- western Punjab by Central Ground Water Board, it has been found that one of the major causes of water logging in Muktsar, Faridkot and Ferozepur districts of Punjab is continuous seepage from Rajasthan and Sirhind Feeder canals. The project for relining of Sirhind Feeder from RD. 119700 to 447927 costing `489.165 crore has been approved by Government of India under AIBP. 25% grant assistance on the cost of project benefiting Punjab (Rs.333.71 crore) and 90% grant assistance under AIBP on the cost of project benefiting Rajasthan (Rs.155.46 crore) is payable by Government of India. After completion of the project, better irrigation facilities would be available to an area of 34548 acres in Punjab and Rajasthan. It shall also help in reclaiming 84800 hectare water logged area in Muktsar, Faridkot and Ferozepur Districts of Punjab. The project could not be started during 2010-12. No expenditure was incurred during 11th Plan. An outlay of `250.00 crore and `40.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `40.00 crore is provided for Annual Plan 2013-14.

IR-12/IR-15 Project for relining of Rajasthan Feeder from RD 179000-496000 (AIBP)

(90:10) (GoI : Rajasthan)

Outlay - `100.00 crore

3.1.19 In a comprehensive assessment of water logging in Southern- Western Punjab by Central Ground Water Board, it has been found that one of the major causes of water logging in Muktsar, Faridkot and Ferozepur districts of Punjab is continuous seepage from Rajasthan and Sirhind Feeder canals. The project for relining of Rajasthan Feeder from RD. 179000 to 496000 costing `952.100 crore has been approved by Government of India. As per the AIBP Guidelines 90% grant assistance under AIBP on the cost of project is payable by Government of India and balance 10% is to be paid by Government of Rajasthan. The project is proposed to be taken up during March 2010 and would be completed by 2013-14. After completion of the project, better irrigation facilities would be available in an area of 93117 acres in Punjab and Rajasthan. It shall also help in reclaiming 84800 hectare water logged area in Muktsar, Faridkot and Ferozepur Districts of Punjab. The project could not be started during 2010-12. The project is proposed to be completed in the next 4 years. No expenditure was incurred during 11th Plan. An outlay of `700.00 crore

and `80.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `100.00 crore is provided for Annual Plan 2013-14.

State Funded Schemes

IR-08/IR-11 Completion of Residual Works and Safety Related Works of Ranjit Sagar Dam

Outlay – `5.00 crore

3.1.20 Ranjit Sagar Dam Project has been generating of power since 2000-01. The funds are being provided for the implementation of safety related works of Ranjit Sagar Dam. An outlay of `100.00 lac was provided for Annual Plan 2011-12. An outlay of `7500.00 lacs was provided under this scheme in the 11th Plan against which an expenditure of `65.58 lacs has been incurred. An outlay of `54.75 crore has been provided in the 12th Plan 2012-17. An outlay of `54.75 crore and `1.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `5.00 crore is provided for Annual Plan 2013-14.

IR-09/IR-12 Lining of Channels Phase-I(Land compensation liabilities)

Outlay - `0.50 crore

3.1.21 An outlay of `0.50 crore is provided in the Annual Plan 2013-14 for pending liabilities.

IR-13//IR-16 Public Works Information Management system (PWIMS) in the Irrigation Department

Outlay - `1.20 crore

3.1.22 Irrigation Department has planned to introduce Public Works Information Management System (PWIMS) in the year 2010-11 onwards to bring transparency in the activities of the department. The objectives of PWIMS are listed as under:

- Accurate planning, scheduling, budgeting and project management. Reduced project cycle time as well as improved access to information for better decision making/improved cost management.
- Reduction of travel of engineers/officers within the state for frequent meetings and submission of reports.
- Transparency in the activities of the department. Improved services to the public.

3.1.23 Punjab Information & Communication Technology Corporation Ltd. (PICTC) has been associated for technical assistance required for implementation of the project. The estimated cost for implementation of the project is `5.00 crore. An expenditure of `2.88 crore was incurred against the approved outlay of `5.00 crore during 2010-11. An expenditure of `2.88 crore was incurred during 11th plan. An outlay of `5.20 crore and `1.20 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `1.20 crore is provided for Annual Plan 2013-14.

IR-14/IR-17 Upgradation of Infrastructure facilities in Irrigation and Power Research Institute Amritsar

Outlay – `5.00 crore

3.1.24 The proposal aims to upgrade the existing research, testing & Training facilities of the Irrigation & Power Research Institute, Amritsar for the development of water resources and other projects of the State. To achieve this goal all the laboratories of the Irrigation & Power Research Institute, Punjab, Amritsar shall be equipped with the modernized equipment and other facilities based on the latest advancement in the field of collection of data, their analysis and presentation for application in the field.

3.1.25 The concrete technology, Geotechnical, Reclamation & Soil survey and Hydrology and Groundwater divisions are located in the sheds. It is essential to construct the new buildings in place of sheds and equip them with the new state of the art technology. At Malakpur the indoor Hydraulic laboratory and a guest house will be constructed for conducting the model studies and providing training to the in-service engineers of the Irrigation and other departments.

3.1.26 The up gradation of laboratories of the Institute with latest electronic and sophisticated instruments and awareness of the research staff with published research work of various Research Institute shall boost the research and development capabilities of the various laboratories of the institute. All these benefits are directly and indirectly associated with the water resources sector at State and National level. An outlay of `9.51 crore and `1.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `5.00 crore is provided for Annual Plan 2013-14.

Ongoing Schemes**Centrally Sponsored Schemes****MI-01 Converting Banur Canal from Non Perennial to Perennial-
(RIDF-XII)(95:5)**

Outlay - `30.00 crore

3.1.27 Banur Canal is a non-perennial canal being fed from Ghagger river by construction of katcha earthen bundh for the period from November to June. This project envisages of a pucca weir across for river Ghagger to feed Banur canal with an assured supply of water through out the year in S.A.S. Nagar and Patiala districts. The total cost of the project is `58.15 crore out of which NABARD share is `45.56 crore and state share is `12.59 crore. The updated revised cost of the project is `87.14 crore. With the completion of this project, 36022 acres of agricultural area of 60 villages, falling in Derabassi, Rajpura and Ghanur blocks of District Patiala shall be benefited. New area of 3000 acres shall also be brought under the command of Banur Canal system. The Project could not be started during 2010-11. An outlay of `50.00 crore was provided under this scheme in the 11th Plan against which an expenditure of `18.22 crore has been incurred. An outlay of `21.44 crore and `20.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `30.00 crore is provided for Annual Plan 2013-14.

**MI-04/MI-2(i) Installation of 280 Deep Tubewells and 10 other Tubewells in Kandi
Area RIDF- XV (95:5)**

Outlay - `30.00 crore

3.1.28 The project for installation of 280 No. Deep tubewells in Kandi area of Punjab State for irrigation purposes costing `130.06 crore has been sanctioned by NABARD under RIDF-XV on 27/10/2009 against which an amount of `123.56 crore is to be financed by NABARD as a loan during 3 years of its implementation w.e.f.1/4/2009. The scheme is proposed to be completed by 31/3/2013. An expenditure of `33.79 crore has been incurred during 11th plan. No outlay has been provided in the 12th Plan 2012-17 and an outlay of `30.00 crore has been provided in the Annual Plan 2012-13. An outlay of `30.00 crore is provided for Annual Plan 2013-14.

**MI -05/MI-03 (i) Construction of new 9 Low Dams-(RIDF-XIII, XIV) (95:5) (W+S)
and ACA 2011-12**

Outlay – `20.00 crore

3.1.29 The department of irrigation identified 9 new dams namely, Arniala, Ramtatwali, Chak Sandhu, Bachhoie in district Hoshiarpur, Kukkar Shuha, Takrala, Mohan Majra Nighi in district Nawanshahar and Haripur dam in district Ropar which are proposed to be taken up in a phased manner and will create an irrigation potential of 5027 ha (12400 acre). The approximate cost of dams will be `345 crore. Out of these 9 dams a proposal for funding 4 dams namely Nara, Arniala, Mohan Majra Nighi and Chak Sandhu dam costing `89.06 crore at price level 2007 has been submitted to NABARD under RIDF XIV for approval. Nala Dam in district Hoshiarpur has been sanctioned and work is likely to start during 2012-13. An expenditure of `57.02 crore has been incurred during 11th plan. An outlay of `300.00 crore and `10.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `20.00 crore is provided for Annual Plan 2013-14.

MI-06/MI-07 Externally Aided Hydrology Project Phase-II (World Bank) (80:20)

Outlay – `20.00 crore

3.1.30 Hydrology Project Phase-II is being financed by World Bank through MoWR and stands approved as per World Bank communication dated: 25-8-2004 of MoWR. 13 States including Punjab along with various central agencies are executing the project. The total duration of the project is six years starting from Nov. 2003. The Punjab component of HP-II is `40.95 crore with contingent cost as `49.78 crore which does not include the cost of land to be acquired for various purposes. The revised cost of the project is `60.67 crore. The main objective of the project is to improve the institutional and organizational arrangements, technical capabilities and physical facilities available for measurements, validation, collection, analysis, transfer and dissemination of hydrological, hydro metrological and water quality data which is basic for water resources evaluation and help in the development of the improved water resources and environmental planning and management. The project is to be implemented over a period of six years. The project has been declared effective w.e.f. 5/4/2006 with the completion date 31/3/2013. An outlay of `44.50 crore was provided under this scheme in the 11th Plan against which an expenditure of `16.23 crore has been incurred. An outlay of `46.43 crore and `30.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `20.00 crore is provided for Annual Plan 2013-14.

MI-07/MI-11 Artificial Recharge to augment declining ground water resources

(RIDF- XIII) (95:5)

Outlay - `6.00 crore

3.1.31 8 pilot recharge schemes are being executed with the financial & technical assistance of Central Ground Water Board. The initial results are encouraging. On the basis of master plan on artificial recharge for Punjab State (prepared by CGWB), a project for 'Artificial Recharge to Augment Declining Ground Water Resources of the State' amounting to `31.90 crore for Moga district has been partially approved for `9.62 crore for funding under RIDF-XIII. An outlay of `30.00 crore was provided under this scheme in the 11th Plan. No expenditure has been incurred during 11th plan. An outlay of `11.00 crore and `6.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `6.00 crore is provided for Annual Plan 2013-14.

State Funded Schemes

MI-08/MI-12 Remodeling/Construction of distributaries/ minors-13th Finance

Commission and ACA 2011-12

Outlay - `85.00 crore

3.1.32 Under this scheme remodeling/construction of distributaries and minors are being undertaken to enhance their carrying capacity which with the passage of time has been reduced due to various reasons, like increase in co-efficient of rugosity in the various districts. For optimum utilization of the available surface water through the canal network, an efficient and well maintained canal system is of utmost importance. Punjab has made tremendous progress in development of canal network, which presently comprises of about 14500 km of canals/distributaries/minors for utilizing existing water resources. In the 10th Plan, the expenditure incurred was `27.43 crore. The 13th Finance Commission has recommended a grant of `200.00 crore for creation and maintenance of irrigation infrastructure in the Punjab State. This grant will be utilized for remodeling and construction of distributaries/minors in the State, accordingly a provision of `50.00 crore is made for this scheme in the revised estimates of 2011-12. Government of India has also recommended `85.00 crore as one time ACA under this scheme for the year 2011-12. An outlay of `55.00 crore was provided under this scheme in the 11th Plan against which an expenditure of `346.55 crore has been incurred. An outlay of `500.00 crore and `50.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `85.00 crore is provided for Annual Plan 2013-14.

MI-09/MI-13 Integrated Utilization of Water Resources (W)

Outlay - `6.00 crore

3.1.33 This is a research oriented scheme to collect, monitor and analysis the data regarding the depletion of ground water level in the State. The various works are being executed for recharging the ground water level. E-Bores are installed to determine the aquifer parameters of water bearing strata and its quality along soil characteristics in the entire State. This helps in estimation of static ground water resources available for future utilization. An outlay of `34.00 crore was provided under this scheme in the 11th Plan against which an expenditure of `27.62 crore has been incurred. An outlay of `61.00 crore and `3.80 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `6.00 crore is provided for Annual Plan 2013-14.

MI-10/MI-14 Replacement /Renovation of Existing Tubewells

Outlay – `2.00 crore

3.1.34 Under this project the replacement/renovation of existing tubewells installed by the Department of Irrigation are to be undertaken. In this regard, PWRMDC Ltd. has planned to install 160 alternate tubewells, costing `40.00 crore against the abandoned tubewells to restore the irrigation potential already created as well as to utilize the existing infrastructure of abandoned tubewells. An outlay of `10.00 crore lacs was provided under this scheme in the 11th Plan against which an expenditure of `105.00 crore has been incurred. An outlay of `6.00 crore and `1.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `2.00 crore is provided for Annual Plan 2013-14.

MI-11/MI-16 Lining/Construction of Channels and Distributaries RIDF – XIV (95:5)

Outlay – `0.30 crore

3.1.35 This project comprises lining of 41.60 Km length of channels at an estimated cost of `14.17 crore (Based cost September, 2008) in Ferozpur Distt. An additional irrigation potential equal to 8169 hectares annually will be created on the completion of this project. This project stands sanctioned by NABARD authority for `1416.97 lacs. The lining work of these channels has been taken in hand during the Oct, 2009. No outlay has been provided in the 11th Plan 2007-12. An expenditure of `11.11 crore has been incurred. No outlay has been provided in

the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 0.30 crore is provided for Annual Plan 2013-14.

COMMAND AREA DEVELOPMENT

Ongoing Schemes

Centrally Sponsored Scheme

Outlay - ` 310.00 crore

3.1.36 In order to conserve substantial percentage of precious surface water being lost through seepage from katcha (unlined) water courses in the canal command areas of the State and to make optimum utilization of the scarce water for maximum productivity, the work of lining of watercourses was entrusted to Punjab Water Resources Management Development Corporation Ltd in 1974. Since 2008-09 the Government of India decided to carry out the work of field channels under AIBP on 50:50 basis with sharing pattern of 50:40:10 between GoI, GoP and beneficiary farmers. Out of the total 1,20,000 km of watercourses in Punjab, 84000 km (70%) are to be lined. 47298 km of water courses has been lined under the different schemes upto March 2013, 36702 km of katcha watercourses are yet to be lined. The work for lining of water courses on five no. projects i.e Eastern Canal System, Kotla Branch, UBC Sirhind Feeder part-11 and Bathinda Branch Part-11 was taken up during 11th plan, out of which eastern canal system and Kotla Branch have been completed on 31/10/2007 and 31/3/2008 respectively & remaining three are on going. During 2007-10 the expenditure incurred was ` 227.21 crore. An expenditure of ` 123.85 crore was incurred against the approved outlay of ` 100.00 crore during 2010-11. An outlay of ` 200.00 crore was provided under this Sub-head "CAD" in the 11th Plan against which an expenditure of ` 510.45 crore has been incurred. An outlay of ` 1183.07 crore and ` 300.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 310.00 crore is provided in the Annual Plan 2013-14

The priority will be:

- (1) Where the area is water logged and underground water is not fit for irrigation;
- (2) Where the underground water is brackish i.e Kharamajha area; and
- (3) Sweet water zone.

CAD-01 Construction of field Channels on UBDC system (AIBP) (50:40:10)

Outlay – `10.00 crore

3.1.37 This is an on going scheme and is being implemented under Command Area Development Agency (CAD) wing of MoWR, GoI and stands sanctioned vide dated 24/2/2004. The total cost of the project is `358.57 Cr which is revised @ `15000/- per ha w.e.f. 1/4/2009. On physical side the target is 184861 ha. The completion date is 31/3/2013. An outlay of `36.80 crore was provided under this scheme in the 11th Plan against which an expenditure of `37.58 crore has been incurred. An outlay of `263.62 crore and `30.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `10.00 crore is provided for Annual Plan 2013-14. Project is likely to be completed by 31/3/2015.

CAD-04/CAD-06 Construction of Field Channels on Sirhind Feeder Phase-II Canal System (AIBP) (RIDF-XIII) (50:40:10)

Outlay - `100.00 crore

3.1.38 This is an on going scheme and is being implemented under Command Area Development Agency (CAD) wing of MoWR, GoI and stands sanctioned on 15/2/2008. The total cost of the project is `628.35 crore which is revised @ `15000/- per ha w.e.f 1/4/2009. State share of this project of `121 Cr has already been sanctioned by NABARD vide dated 28/7/2008 under RIDF-XIII. On physical side the target is 314496 ha. The expenditure incurred during 2008-09 was `38.03 crore. An outlay of `60.00 crore was provided under this scheme in the 11th Plan against which an expenditure of `234.70 crore has been incurred. An outlay of `355.21 crore and `100.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `100.00 crore is provided for Annual Plan 2013-14. The Project is likely to be completed by 31/3/2015.

CAD-05/CAD-07 Construction of Field Channels on Bhatinda Branch Phase-II Canal System (AIBP)/(50:40:10)

Outlay – `50.00 crore

3.1.39 This is an on going scheme and is being implemented under Command Area Development Agency (CAD) wing of MoWR, GoI and stands sanctioned on 6/5/2008. The total cost of the project is `366.10 crore which is revised @ `15000/- per ha w.e.f 1/4/2009. State share of this project of `70 crore has already been

sanctioned by NABARD vide dated 21/4/2008 under RIDF-XIII. On physical side the target is 181707 ha. The expenditure incurred during 2008-09 was ` 38.25 crore. The completion date is 31/3/2014. An outlay of ` 40.00 crore was provided under this scheme in the 11th Plan against which an expenditure of ` 131.57 crore has been incurred. An outlay of ` 152.45 crore and ` 50.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 50.00 crore is provided for Annual Plan 2013-14.

**CAD-06/CAD-08 Lining of Abohar Branch (U) Canal System in Faridkot District
RIDF- XV (95:5)**

Outlay – `100.00 crore

3.1.40 NABARD has approved a project costing ` 147.62 crore for lining of water courses of Abohar Branch Canal, district Faridkot out of which loan component is ` 102.90 crore and state share is ` 29.96 crore. Besides ` 14.76 crore will be contributed by the beneficiaries. It will benefit about 100575 hectares of land. No outlay was provided under this scheme in the 11th Plan. An expenditure of ` 69.94 crore has been incurred during 11th plan. An outlay of ` 122.38 crore and ` 100.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 100.00 crore is provided for Annual Plan 2013-14.

**CAD-03/CAD-05 Construction of Field Channels on Sidhwan Canal System
(AIBP) (50:40:10)**

Outlay - `0.00 lac

3.1.41 This is a new scheme and will be implemented under Command Area Development & Water Management Agency (CAD) Wing of Ministry of Water Resources, Government of India. The total cost of the project is ` 218.44 crore. The project is yet to be approved by GoI. An outlay of ` 20.00 crore was provided under this scheme in the 11th Plan. No expenditure was incurred during 11th plan. An outlay of ` 200.00 crore has been provided in the 12th Plan 2012-17 and no outlay has been provided in the Annual Plan 2012-13 and 2013-14.

**CAD-07/CAD-09 Lining of Water Courses on Bhakra Main Branch (B.M.B) Canal
system RIDF- XVI (95:5) (New Scheme)**

Outlay - `50.00 crore

3.1.42 The NABARD has approved the project for lining of 1790 kms. length of watercourses on Bhakra Main Branch Canal System amounting to ` 209.55 crore on 16th, November, 2010 and sanctioned loan amounting ` 142.41 crore against this project. This

will benefit 176 villages in the Bathinda and Mansa districts of Punjab. Under this project, 10% share of cost of works will be provided by the beneficiaries. The work was started during the financial year 2010-11 and completion date is 31/3/2013. An expenditure of ` 18.30 crore was incurred during 11th plan. An outlay of ` 89.40 crore and ` 20.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 50.00 crore is provided for Annual Plan 2013-14. The project is likely to be completed by March, 2014.

FLOOD CONTROL AND ANTI WATER LOGGING

Ongoing Schemes

Centrally Sponsored Scheme

FC-01/FC-02 Construction of embankments and widening of River Ghaggar from Khanauri to Karail in District Sangrur (RIDF-XII) (95:5)

Outlay - ` 1.00 crore

3.1.43 River Ghaggar is a non-perennial inter-state river. About 165 Kms length of river Ghaggar falls in Punjab territory, out of which 102 Km is in district SAS Nagar and Patiala, 40 Km is in district Sangrur and the remaining 23 Km is in district Mansa. The aim to save the agricultural land and village abadis of the area of district Sangrur adjoining river Ghaggar from flood damages during every rainy season. The total cost of the project is ` 137.43 crore out of which NABARD assistance is ` 67.49 crore and State share is ` 69.94 crore which includes the land compensation of ` 48.12 crore ($69.94 - 21.82 = 48.12$ crore). An outlay of ` 66.61 crore was provided under this scheme in the 11th Plan against which an expenditure of ` 91.88 crore has been incurred and the area benefited is 24246 acres. An outlay of ` 5.00 crore and ` 1.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 1.00 crore is provided for Annual Plan 2013-14. The area benefited is 24246 acres.

FC-02/FC-05 Project for Antiwater Logging/Drainage & Flood Control Works- (RIDF-XIII) (95:5)

Outlay - ` 3.00 crore

3.1.44 The Drainage Administration has been entrusted with the work of constructing embankments, river training works and drains to save the area from flooding and water logging. The embankments and river training works and drains constructed by the drainage administration have to be maintained for their proper functioning to avoid any mishap during the floods. It envisages new project for anti water logging and flood

control works under this scheme. An outlay of ` 1.00 crore was provided under this scheme in the 11th Plan against which an expenditure of ` 22.22 crore has been incurred. An outlay of ` 1.00 crore and ` 1.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 3.00 crore is provided for Annual Plan 2013-14.

FC-06/FC-11 Canalization of Sakki/Kiran Nallah (75:25)(FMP)

Outlay - ` 30.00 crore

3.1.45 In order to save the agricultural land and village abadies in Amritsar and Gurdaspur districts from floods, the work of canalization of Sakki/Kiran Nallah in Amritsar and Gurdaspur with approximate cost of ` 118 crore (75% GoI Grant and 25% State share) has been sanctioned on 28/5/2008 by GoI. The following works are to be under taken;

Date of start	11/12/2008
Total Length to be Canalized	150 Kms
Area to be Benefited	70000 Acres
Population to be Benefited	500000 Nos
Period of Completion	3 year(31-3-2013)
Total Length of Drains out falling	328 Kms
New Bridges to be Constructed	30 Nos

3.1.46 An expenditure of ` 27.27 crore was incurred during 11th plan. An outlay of ` 100.00 crore and ` 27.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 30.00 crore is provided for Annual Plan 2013-14. The work of construction of 17 No. V.R. Bridges have been completed.

FC-07/FC-12 Investment Clearance Plan for Flood Protection Works under Flood Management Programme (FMP) of GoI (75:25)

Outlay – ` 5.00 crore

3.1.47 Punjab being a riparian State has to suffer and face devastation due to floods in three rivers i.e. Ravi, Sutluj and Beas whereas non-riparian States Rajasthan and Haryana remain immune to adverse action of floods. The State Government has submitted projects (20 no. schemes) of ` 330.00 crore for flood protection works to Central Water Commission (CWC) for approval. The CWC, GoI has sanctioned following three projects with a cost of ` 30.99 crore (75% GoI Grant and 25% state share) under Flood Management

Programme for district Nawanshehar and Hoshiarpur :-

Name of the project	Cost (` crore)
(i) Construction of FPW along I-R Bandh on river Sutluj and local protection works along choes in district Nawanshahar.	11.67
(ii) Plugging and stg. breaches and bringing to design section of FPE along choes in district Hoshiarpur(Part-I)	11.27
(iii) Plugging and strengthening breaches and bringing to design section of FPE along Mechagerwal choe, Arniala choe and Gambowal choe in district Hoshiarpur(Part-I)	8.05
Total:	30.99

An expenditure of `4.69 crore was incurred against the approved outlay of `20.00 crore during 2010-11. An expenditure of `16.66 crore was incurred during 11th plan. An outlay of `270.00 crore and `15.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `5.00 crore is provided for Annual Plan 2013-14. The area benefited is 22980 acres.

FC-08/FC-13 Link Drains/Water logging, Flood Control Drainage works in the State- RIDF- XIV (95:5)

Outlay – `30.00 crore

3.1.48 In order to tackle the water logging problems in south-western districts of the State, NABARD has approved 27 schemes with a total cost of `25.73 crore (NABARD share `24.04 crore and state share `1.69 crore) on 17/11/2008 for construction of sub- surface drains and lift schemes of various villages in Mutksar and Faridkot districts. NABARD has also approved 9 schemes of `38.23 crore (NABARD share `37.05 crore and state share `1.18 crore) for tackling of water logging problem in district Muktsar. The target dated is 31/3/2014. An expenditure of `8.33 crore was incurred during 11th plan. An outlay of `38.22 crore and `5.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `30.00 crore is provided for Annual Plan 2013-14. Under this scheme the area benefited is 14326 acres.

FC-09/FC-15 Construction of Flood protection Works along River Ujh, District Gurdaspur (FMP)(75:25)

Outlay – `6.00 crore

3.1.49 The project has been cleared by Planning Commission Govt of India vide `

letter dated 4-8-2011. An outlay of `5.00 crore and `5.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `6.00 crore is provided for Annual Plan 2013-14 for Construction of Flood protection Works along River Ujh, District Gurdaspur.

FC-10/FC-14 Measures to address the Problem of Water Logging in the State -13th Finance Commission

Outlay – `50.00 crore

3.1.50 The water table is rising in south-western districts of the State due to limited or non-extraction of groundwater due to its blackish/saline quality which makes it unfit for domestic, irrigation and other purposes mainly in the Muktsar, Malout and Abohar tracts level. After the construction of twin canals i.e. Rajasthan Canal feeder and Sirhind canal feeder, in addition to Abohar Branch and Bikaner canals, the sub- soil water level started rising at the rate of 0.2 metre to 1.0 metre annually. The area has witnessed a rise in water level upto 22 metre in the last 25 years. The main reason of water logging is non-extraction of underground water, which is blackish/saline.

3.1.51 Due to water-logging in these areas about 1.04 lac hectare area out of 2.16 lac hectare area of Muktsar has become critically water logged, the land stands submerged and is totally unfit for cultivation, the rising water table is making the land saline and unfit for productivity when ground water reaches the root zone area of crops. It has resulted in reduced agriculture production & soil quality deterioration, more inputs by farmers, thereby raising input costs and decreasing returns due to low productivity of crops.

3.1.52 A comprehensive project has been prepared comprising of providing new surface drains; sub-surface drainage system, lift schemes, correction in deficiencies of existing drains by constructing new bridges or by deepening and widening the existing drains, laser leveling and other miscellaneous measures such as pisciculture, bio-drainage and energisation of shallow tubewells. The projects proposed to be executed under anti water logging scheme are as under:-

(` lac)

SN	Name of Scheme	Estimated Cost
1.	Construction of left out pucca works on various drains in district Muktsar, Ferozepur and Faridkot	901.19
2.	Providing sub surface drainage schemes in low lying pockets in district Muktsar, Faridkot and Ferozepur	8000.00
3.	Cleaning and desilting of drains in Kahnuwan bet area in district Gurdaspur	250.00
	Total	9151.19

3.1.53 13th Finance Commission has recommended a grant of `200.00 crore four years i.e. 2011-2015 for anti water logging measures for Punjab State out of which `50.00 crore are provided during 2011-12. No expenditure was incurred during 11th plan. An outlay of `200.00 crore and `50.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `50.00 crore is provided for Annual Plan 2013-14.

FC-11/FC-16 Providing Emergent Flood Protection on River Sutlej, Beas and Ravi(95:5) (RIDF-XVII)

Outlay – `10.00 crore

3.1.54 165 schemes of flood protection works on rivers Sutlej, Ravi & Beas in Punjab State NABARD RIDF-XVII during the year 2011-12 amounting to `78.74 crore. Out of these funds for `15.15 crore has been released by NABARD. The detail is as under:-

No. of projects sanctioned	165 Nos
Total financial outlay	`79.74 crore
NABARD share	Rs.75.75 crore
State share	Rs.3.99 crore
No.of works to be executed	127 Nos.
Cost	Rs.58.30 crore

An outlay of `5.00 crore and `5.00 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `10.00 crore is provided for Annual Plan 2013-14.

New Schemes

FC-12 Construction of Flood Protection Works along left side and right sides of River Beas in District Gurdaspur, Hoshiarpur and Kapurthala

Outlay – `0.01 crore

3.1.55 This project has been approved by Government of India for Construction of Flood Protection Works along left side and right sides of River Beas in District Gurdaspur, Hoshiarpur and Kapurthala. The case for release of funds is under process in Central Water Commission Office (CWC) of Govt. of India. Under the scheme, token outlay of `0.01 crore has been provided for the Annual Plan 2013-14 for Construction of Flood Protection Works along left side and right sides of River Beas in District Gurdaspur, Hoshiarpur and Kapurthala.

FC-13 Consolidated Project proposal for works to be executed alongwith Indo Pak Border on River Ravi to check erosion and to neutralise effect of protection works executed by Pakistan Govt.

Outlay – `0.01 crore

3.1.56 This project have been prepared by the Drainage Administration for the safety of c-land and village abadies along indo-Pak Border on River Ravi to be funded under BADP. The site inspection has been done by CWC Team. The project has been cleared by State Technical Advisory Committee. Administrative approval stands issued by the State Government. It required to be granted technical clearance. The case is under process in the office of Director CWC, GOI, Chandigarh. Under the scheme token outlay of `0.01 crore has been provided for the Annual Plan 2013-14.

FC-14 Flood Protection Works alongwith river Sutlej under FMP (River Sutlej)

Outlay – `0.01 crore

3.1.57 This project amounting to `133.99 crore relating to River Sutlej was prepared during the year 2010-2011 was submitted to Director, CWC, GOI, New Delhi for approval and release of funds. The case is under process in the office of Director CWC, GOI, Chandigarh. Under the scheme, token outlay of `0.01 crore has been provided for the Annual Plan 2013-14.

FC-15 Flood Protection Works along river Sutlej in district Ferozepur and Taran (D/S Harike H/W to U/S Hussainiwla H/W) River Sutlej

Outlay - `10.00 crore

3.1.58 Under this scheme, a joint project proposal amounting to `41.79 crore of Canal and Drainage Administration namely rehabilitation of flood protection works of Hussainiwala Head works and for construction/repairing and strengthening of flood protection works on river Sutlej in District Ferozepur and Taran Tarn has been submitted to Govt. of India. The case is under process in the office of Director CWC, GOI, New Delhi. In anticipation of clearance of this project from Govt. of India, an outlay of `10.00 crore has been provided in the Annual Plan 2013-14.

100% CENTRALLY SPONSORED SCHEMES

CS(IRRI)-01 Rationalization of Minor Irrigation Statistics (100% CSS)

Outlay - `0.30 crore

3.1.59 This scheme is in operation since 1986-87. The Government of India sponsors this programme on 100% basis for the collection of data on minor irrigation. The census of minor irrigation is conducted on quennial basis as per guidelines of GoI. Data is collected and compiled regarding area irrigated under different crops according to season. Information is also collected regarding extent of construction of minor irrigation works through institutional finance and through own private firms of farmers in between the two quin-quennial census of minor irrigation. The statistics are reported to Government of India on regular basis. An outlay of `2.00 crore was provided under this scheme in the 11th Plan against which an expenditure of `0.79 crore has been incurred. An outlay of `2.56 crore and `51.20 lac has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `0.30 crore is provided for Annual Plan 2013-14.

CS (FC)-02 Construction of Flood Protection and Drainage Works (100% CSS)

Outlay - `7.50 crore

3.1.60 This scheme was started during the year 1983-84. Under this scheme the funds are provided for the execution of emergent flood protection works along international border to divert the flow of river Sutluj away from Indian side. This scheme is approved by the Ministry of Water Resources, Government of India. As per practice in vogue the Remedial Committee constituted by Central Water Commission proposes the funds after visiting the site. The 31st Remedial Committee has already visited the site during January 2011 and has recommended 16 No. emergent works costing `5.97 crore. Works will be started after receipt of funds. No funds were released by Government of India. An outlay of `50.00 crore was provided under this scheme in the 11th Plan against which an expenditure of `7.02 crore has been incurred. An outlay of `37.50 crore and `7.50 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of `7.50 crore is provided for Annual Plan 2013-14.

CS (FC)-03/CS(FC)-06 Counter Protective Measures on left side of river Ravi (100% CSS)

Outlay - `7.50 crore

3.1.61 This scheme was started during the year 1997-98. Under this scheme funds are provided by Government of India for emergent flood protection works along

international border for defense security purposes. This scheme is approved by Ministry of Home Affairs, Government of India. As per practice in vogue the Remedial Committee (constituted by Ministry of Home Affairs) proposes funds after field visits at sites. The 31st Remedial Committee has already visited the site during January 2011 and has recommended 25 No. emergent works costing ` 18.27 crore. Works will be started after receipt of funds. No funds were released by Government of India. An outlay of ` 50.00 crore was provided under this scheme in the 11th Plan against which an expenditure of ` 3.95 crore has been incurred. An outlay of ` 50.00 crore and ` 7.50 crore has been provided in the 12th Plan 2012-17 and Annual Plan 2012-13 respectively. An outlay of ` 7.50 crore is provided for Annual Plan 2013-14.